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Carolle Cook

Applicant : Ching-Fong Su
Application No. : 09/810,892
Filed : March 17, 2001
Title : ONLINE DISTRIBUTED PROTECTION PATH ROUTING METHOD
AND SYSTEM
Grp./Div. : 2633
Examiner : To be assigned
Docket No. : 41914/FLC/F179

TRANSMITTAL OF DRAWINGS

Box Missing Parts
Assistant Commissioner for Patents
Washington, D.C. 20231

Post Office Box 7068
Pasadena, CA 91109-7068
June 21, 2001

Commissioner:

Enclosed are 8 sheets of drawings for this application. They are submitted as
Substitute drawings to replace the corresponding informal drawings as originally filed.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By

Frank L. Cire
Reg. No. 42,419
626/795-9900

FLC/clc
CLC PAS356799.1-*6/21/01 10:15 AM

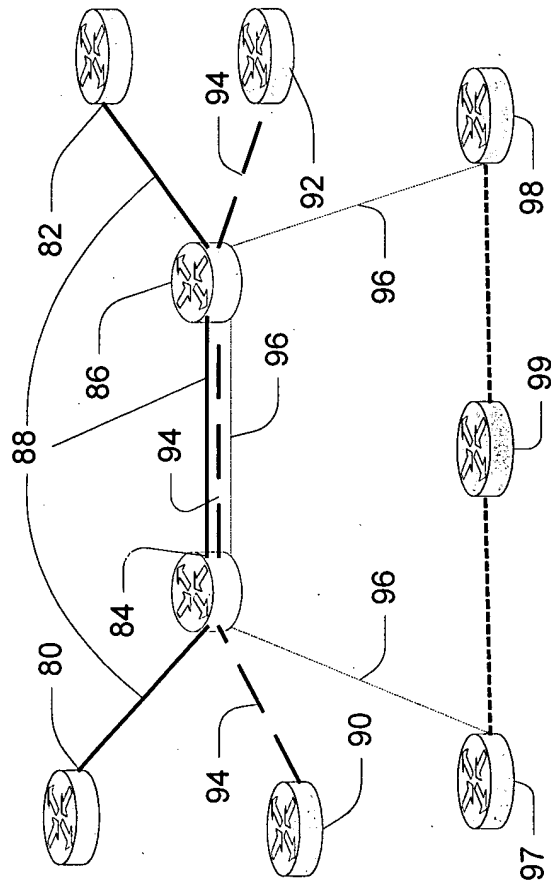


FIG. 1

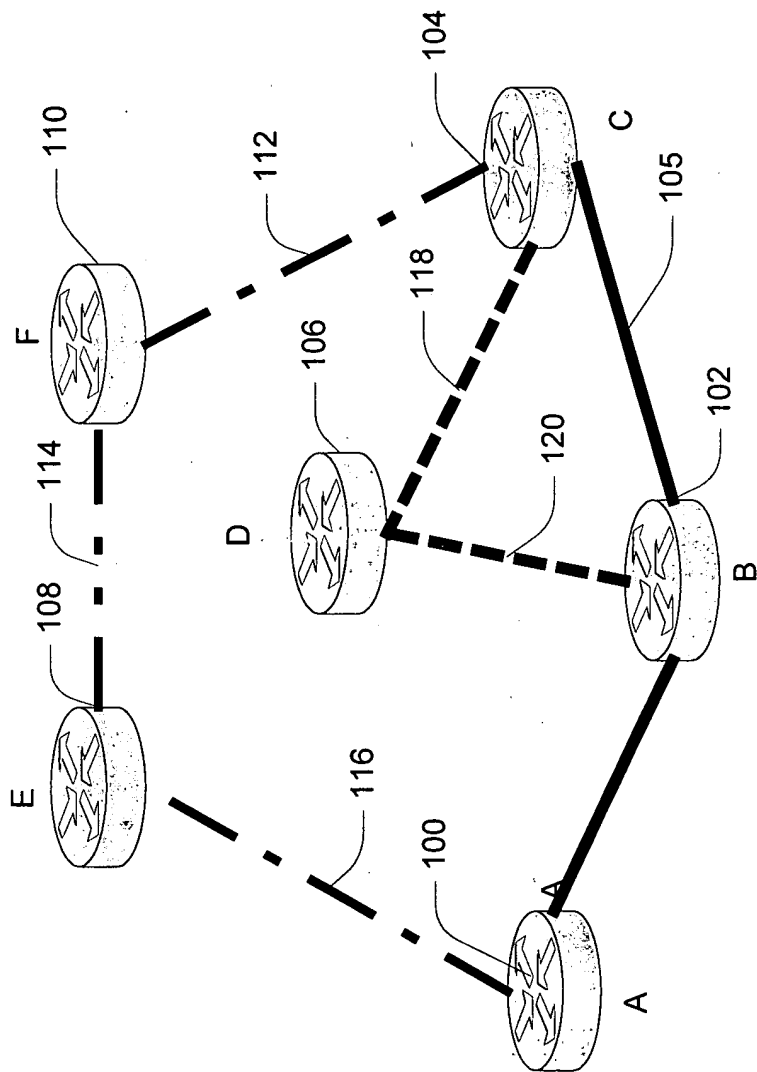


FIG. 2

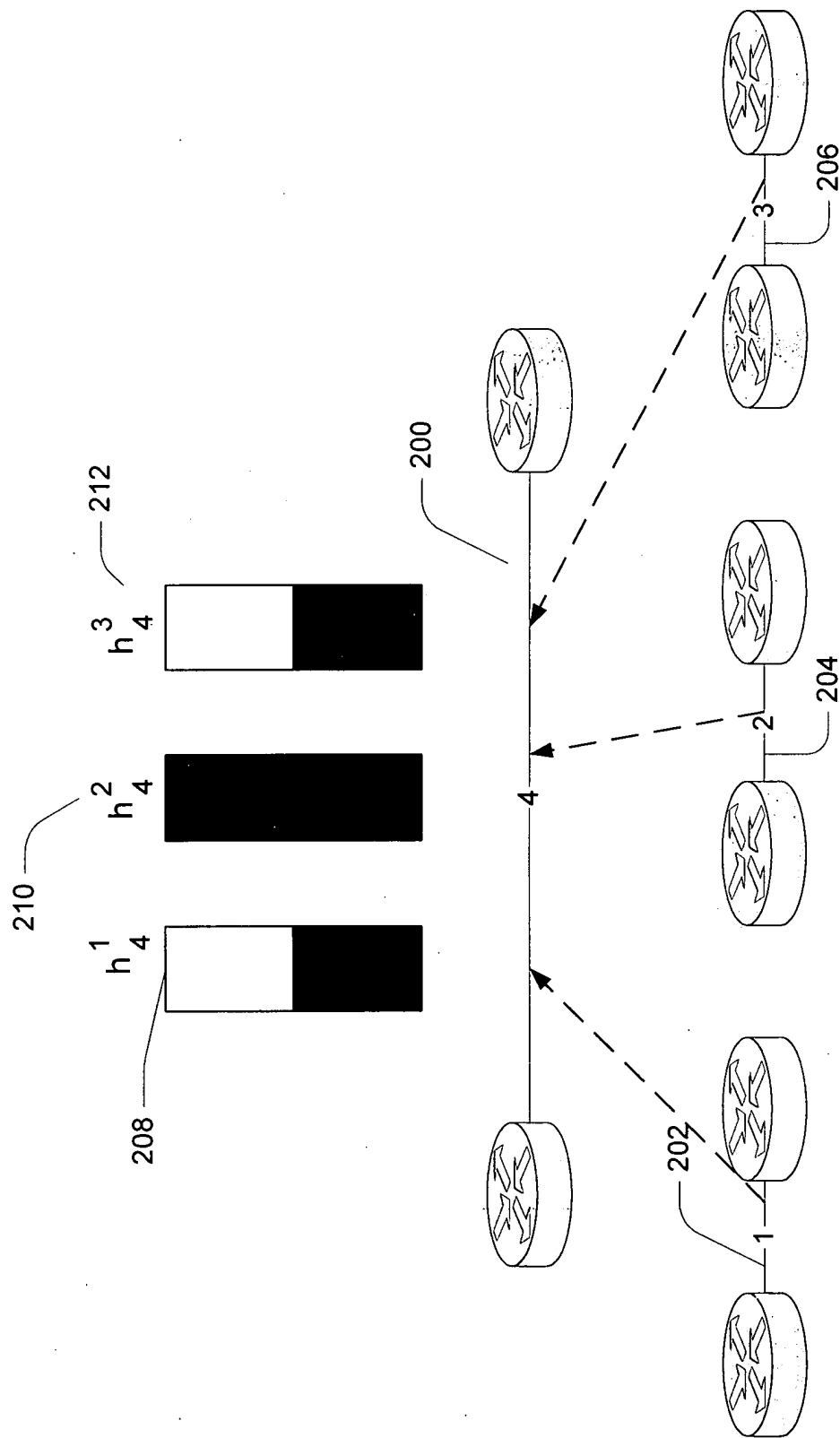


FIG. 3

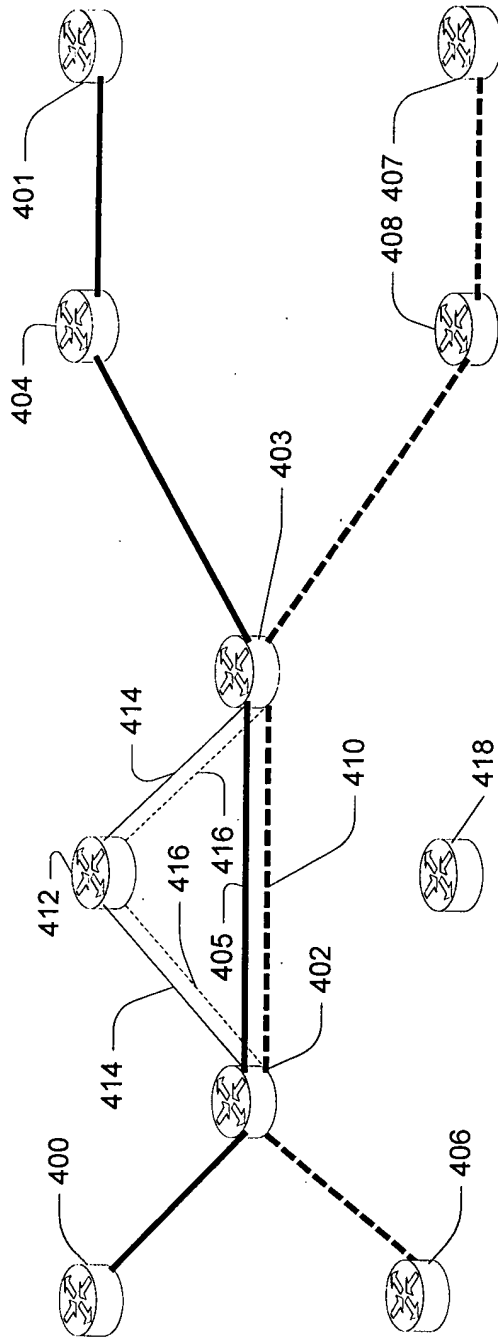


FIG. 4a

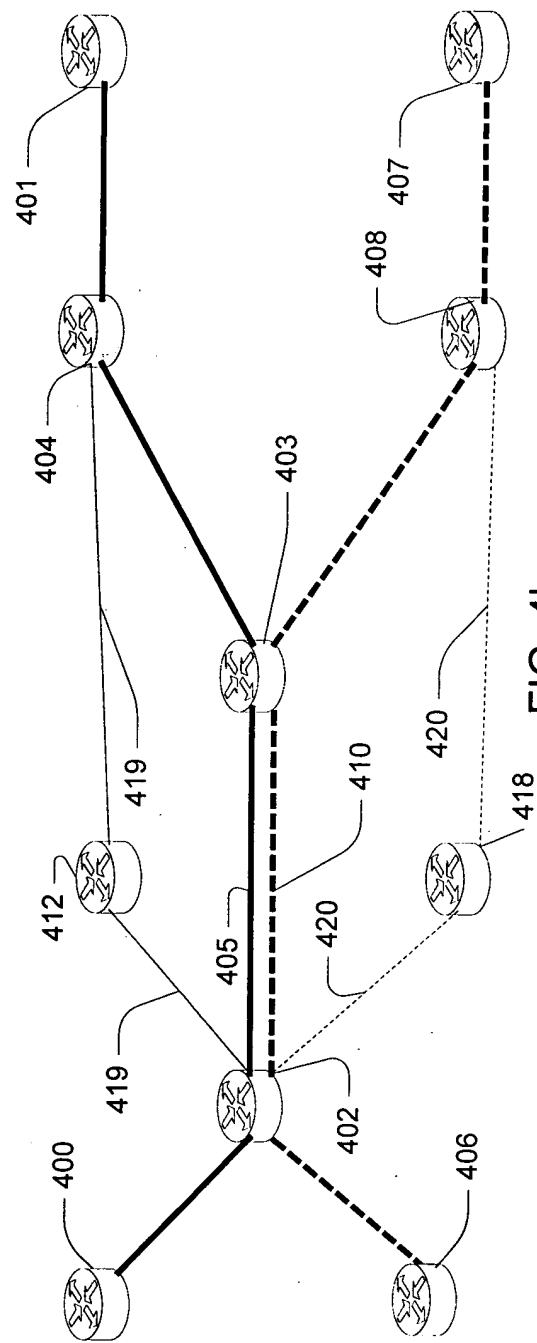


FIG. 4b

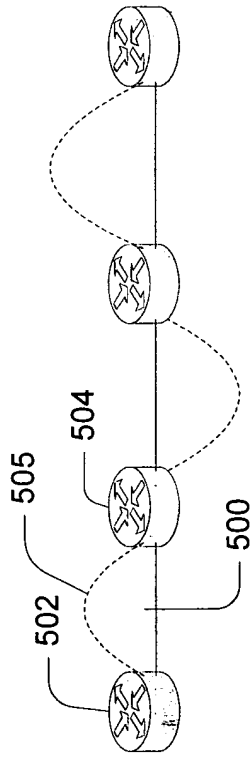


FIG. 5a

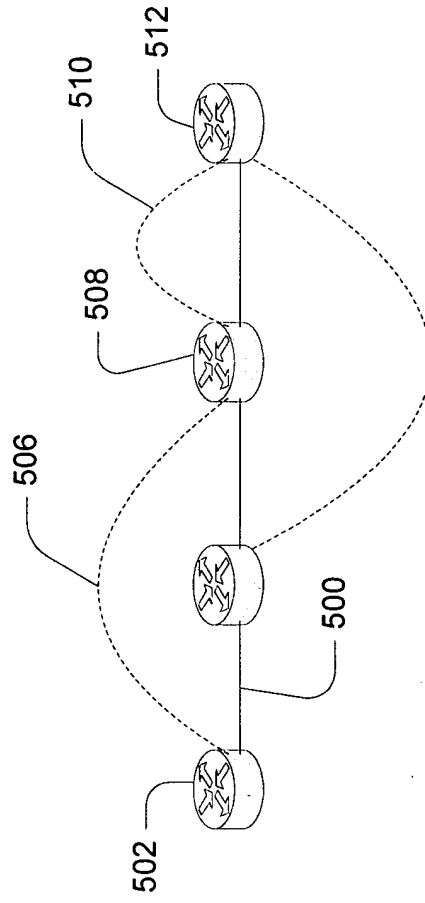


FIG. 5b

Input $G(N, E), s, t, h_e$ 600

$r(s,t) = \text{compute_working_path}(s,t)$ 602

for each link $k^* \in r(s,t)$ 604

$s_node = source(k^*), d_node = end(k^*)$ 606

for each link $l \in E$ 608

Compute $l_width(l, k^*)$ 610

end for

$I_width(k^*, k^*) = -1$ // "Remove" link k^* 614

```

    (widest_paths, widest_width) =
    compute_widest_paths(s_node, d_node)

```

```

    || widest_paths || > 1 and
    widest_width == 0 ?

```

YES

```

    for each  $p \in \text{widest\_paths}$ 

```

```

c[p] = count_exhausted(p)

```

and for

624

626

$p[k^*] = \min_p(c[p])$

Flowchart 634 shows a terminal block labeled "end for". A line from the top of the block connects to the bottom of the "end if" block in flowchart 633. Another line from the right side of the block connects to the top of the "end for" block in flowchart 635.

Return $r(s, t)$, $p[k^*]$ for all links $k^* \in r(s, t)$ 636

618 NO 628

|| widest_paths || > 1 and
widest_width > 0 ?

YES

$p[k^*] = \text{random_select}(\text{widest_paths})$

$p[k^*] = widest_paths$ 632

FIG. 6



FIG. 7

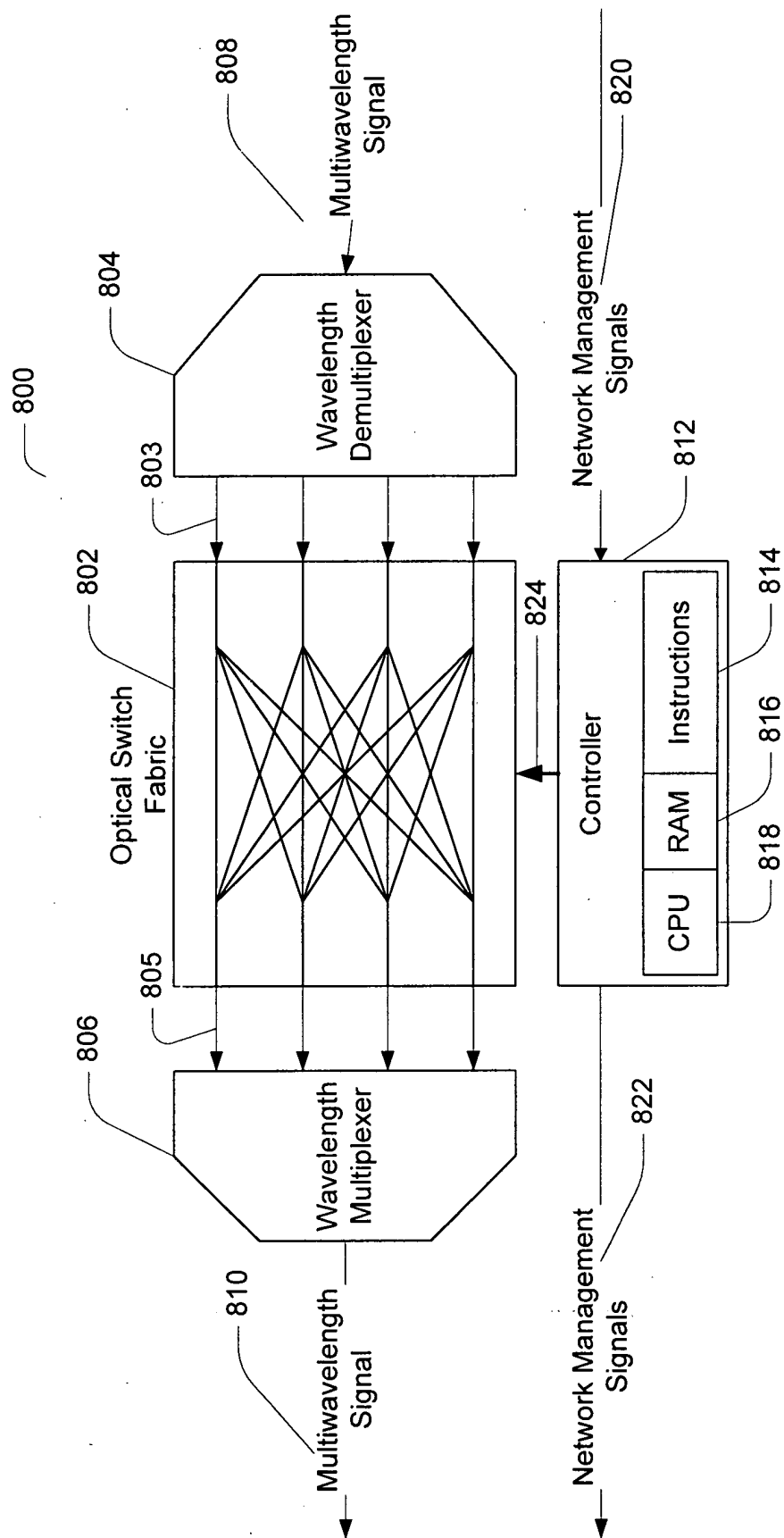


FIG. 8